

STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:)	Docket No. 01-AFC-22
)	
Application For Certification of the)	COMMISSION STAFF'S
San Joaquin Valley Energy Center)	PMPD COMMENTS
_____)	

The Energy Commission Staff ("staff") offers the following comments, corrections and suggestions regarding the Presiding Member's Proposed Decision in this matter.

AIR QUALITY

Page 124, first full sentence. Add a sentence to reflect the December 18, 2003 decision of the San Joaquin Valley Air Pollution Control District (hereafter "Air District") to request extreme ozone nonattainment status:

The San Joaquin Valley Air Basin (SJVAB) is classified as a severe nonattainment area for ozone; it violates both federal and state AAQS. The San Joaquin Valley Air Pollution Control District has proposed that the basin be reclassified as an extreme nonattainment area for ozone.

Page 129, first full paragraph: Substitute "PSA" for "PMPD"

We are pleased that the Committee has accepted our concerns about the offsets presented by the applicant and crafted conditions (**AQ-C7-C9**) to assure that the concerns are addressed prior to the use of the offsets.

Condition AQ-C7 offers the applicant the choice of amending the Pastoria project's offset package to free up an offset that is also listed for this project or submitting an amended offset package for this project. We assume that staff's approval is required for any amendment to the offset package. The "tracking" conditions we propose below explicitly require such approval. Staff review of revisions to the offset package is especially necessary in this case because the offsets serve both to satisfy Air District requirements and as mitigation of potential air quality impacts. An offset that may satisfy Air District requirements may not provide adequate CEQA mitigation due to the distance between the offset source and the project or other factors that staff reviews as part of its analysis.

Regarding Condition **AQ-C9**, we are informed by the Air District that:

The District's offset equivalency reporting system is an annual system - there are no quarterly reports, and the District is not responsible for showing equivalency on a quarterly basis, or any term other than annually. There is one and only one

report generated each year, in November, for the preceding August-to-August period.¹

Given that information, we have no objection to modifying **AQ-C9** to require annual, rather than quarterly, reports so long as the project owner's report is submitted shortly after the Air District generates its report.

Offset "tracking" condition. Though the PMPD asserts that a tracking condition is not required, staff respectfully disagrees. Since the problem of the double-counted ERC was discovered in this case, staff has consistently recommended, and the Commission has adopted, a condition of certification listing the ERCs that the project owner has identified for a project along with the expressed requirement that those ERCs be the ERCs surrendered at the appropriate time.²

A tracking condition is necessary to state and enforce the understanding of all of the parties—Energy Commission staff, applicant and Air District—of the contents of the offset package and their intent that those same offsets will actually be used for the project. Staff's environmental analysis assumed the use of the identified offsets, as does the PMPD's findings.

Staff previously recommended a tracking condition for this project. That condition was in the tabular format that staff uses when an air district has not proposed such a condition. At the hearings in this case, the Air District's witness indicated that the Air District would be adding a tracking condition for all future projects. We have since seen the district's tracking condition form in the Turlock Irrigation District's Walnut Energy Center case (02-AFC-4); it is in the form of individual narrative conditions for each pollutant. We have adopted the Air District's style in proposed Conditions **AQ-C10**

¹ December 17, 2003 email from Dave Warner to Keith Golden.

² The following table lists recent cases in which a tracking condition was proposed. In those cases where the air district does not include a tracking condition in its Determination of Compliance, staff prepares one as part of its staff conditions.

Project	AFC No.	Tracking Condition No.	Decision Date	Proposed By
Pico Combined Cycle - Silicon Valley Power	02-AFC-3	AQ-C6	9/9/2003	Staff
Cosumnes	01-AFC-19	AQ-38	9/9/2003	District
Turlock Irrigation District	02-AFC-4	AQ-98, AQ-100, AQ-102	Awaiting PMPD	District
City of Vernon Combined Cycle	01-AFC-25	AQ-C12	5/20/03	Staff
El Segundo Repower	00-AFC-14	AQ-C5	Awaiting PMPD	Staff
Inland Empire Energy Center	01-AFC-17	AQ-SC9	12/17/2003	Staff
Palomar Energy Project	01-AFC-24	AQ-SC5	8/8/2003	Staff
Morro Bay Modernization	00-AFC-12	AQ-6	Revised PMPD-11/21/03	District
Salton Sea Geothermal Unit 6	02-AFC-2	AQ-5	12/17/2203	District

through **AQ-C12**, below. These conditions were submitted to the Air District for comment. Dave Warner of the district staff reported back to us that they “are consistent with conditions we have committed to placing on Authorities to Construct requiring offsets.”³

AQ-C10 ERC Certificate Numbers S-1340-2, S-1280-2, N-272-2 and S-1554-2 shall be used to supply the required **NO_x** offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. The certificates identified in this condition shall be surrendered only after demonstrating compliance with Conditions **AQ-C7** and **AQ-C9**.

Verification: At least 60 days prior to commencing turbine first fire, the project owner shall surrender the identified ERC certificates and in the amounts shown in **AQ-105** to the District and provide documentation of that surrender to the CPM. Changes to the offsetting proposal must be provided to the District and CPM for review, public noticing, and approval.

AQ-C11 ERC Certificate Number C-348-1, N-303-1, and S-1665-1 shall be used to supply the required **VOC** offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. The certificates identified in this condition shall be surrendered only after demonstrating compliance with Conditions **AQ-C7** and **AQ-C9**.

Verification: At least 60 days prior to commencing turbine first fire, the project owner shall surrender the identified ERC certificates and in the amounts shown in **AQ-105** to the District and provide documentation of that surrender to the CPM. Changes to the offsetting proposal must be provided to the District and CPM for review, public noticing, and approval.

AQ-C12 ERC Certificate Numbers C-347-4, S-1577-4, S-1578-4, S-1666-4, S-1682-4, S-1683-4, S-1684-4, S-1685-4, S-1686-4, S-1687-4, S-1688-4, S-1689-4, S-1690-4, S-1691-4, S-1692-4, S-1693-4, N-297-4, C-447-4, C-448-4, C-449-4 and N-208-4 shall be used to supply the required **PM₁₀** offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct.

³ December 17, 2003, email from Dave Warner to Keith Golden.

Verification: At least 60 days prior to commencing turbine first fire, the project owner shall surrender the identified ERC certificates and in the amounts shown in **AQ-105** to the District and provide documentation of that surrender to the CPM. Changes to the offsetting proposal must be provided to the District and CPM for review, public noticing, and approval.

Given that the Air District would, if preparing the FDOC for this project today, include these tracking conditions in its conditions, it is entirely appropriate and necessary to add Conditions **AQ-C10** through **AQ-C12** to the Air Quality Conditions of Certification.

SO₂ mitigation. In addition to the offsets required by the Air District, staff recommended that offsets for SO₂, a PM10 precursor, be obtained. The PMPD agreed with staff that the applicant must provide offsets for its SO₂ emissions (p. 141), but did not include any conditions to enforce the requirement. We propose the following Condition AQ-C13, written in the Air District's style, to correct that oversight. Just as tracking conditions are appropriate for the district-required offsets, it is appropriate for the SO₂ offsets as well, perhaps more so because currently there is no mention at all of the SO₂ offset requirement in the conditions.

AQ-C13 The project owner shall surrender SO₂ ERC certificates from the San Joaquin Valley Air Pollution Control District ERC bank in the amount of no less than 10,908 pounds per quarter.

Verification: At least 60 days prior to commencing turbine first fire, the project owner shall surrender the ERC certificates in the required amounts to the District and provide documentation of that surrender to the CPM.

NOISE

The PMPD, by adopting the applicant's proposal to limit power plant noise to 49 dBA L_{eq} at the sensitive receptors, would subject those receptors to background noise levels two to four times (10 to 22 dBA increases) above current noise levels, a clearly significant impact under CEQA. Even so, the PMPD finds the increases are not significant. It fails, however to explain the connection between the evidence and its findings or provide an explanation for the findings.

Energy Commission staff has used the background, or L₉₀, noise level for evaluating power plant noise impacts under CEQA for well over a decade.⁴ It has proven to be the most accurate metric for evaluating the steady state noise of a power plant. Though

⁴ In the two recent cases where L₉₀ was not used, there were no sensitive receptors close to the project site. By any measure the noise increases at the nearest sensitive receptor were insignificant. In the La Paloma Generating Project FSA (Exhibit 4B.11) the nearest residence is more than 1 ½ miles distant. Furthermore, La Paloma incorporated noise attenuation into the project by fully enclosing each of the four turbine generators in separate buildings. In the Pastoria Energy Facility FSA (Exhibit 4B.12), the nearest sensitive receptors are 4.4 miles distant and the power plant will be inaudible at any sensitive receptors.

some past applicants have proposed using the equivalent noise level, L_{eq} , or the day-night noise level, L_{dn} , for such comparisons, staff has chosen to continue to use L_{90} .⁵

L_{eq} represents an energy average of all noise during the time period in question. As explained by Jim Buntin at the evidentiary hearing (2/20 RT 139:5-25), L_{eq} averages the energy from all the various noises that make up the noise regime. Several short but loud noises will cause the L_{eq} to rise considerably.

L_{90} represents the background noise level, the noise that is always present. Even when there is no audible traffic (road or air), no animal noises, no sounds of human activity, the background noise remains. Extensive psychological testing has led to the conclusion that this background level is best represented by the L_{90} level.

In our normal, everyday lives, most of the noise we hear (or notice) is continually varying. The display of a noise meter will constantly vary, showing the changing nature of the noise environment about us (the ambient noise). A few noise sources, however, are constant, unchanging and always present. Power plants are one such source, a point of agreement between the applicant (2/20 RT 94:21-95:13) and staff (2/20 RT 141:16-22). When such a constant noise source is added to the ambient noise regime, it adds to the background noise level, the noise that is always there. If the power plant is sufficiently loud, it becomes the new background noise level. The psychological reference against which the brain compares the new (power plant) noise is the background level. For this reason, it is wholly appropriate to employ L_{90} in evaluating power plant noise impacts.

As presently conditioned in the PMPD, background noise levels would more than quadruple (21 to 22 dBA increase) at three of the sensitive receptors; increases of 10 to 20 dBA would occur at four other sensitive receptors. These are “substantial permanent increases,” and therefore significant impacts under the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq., App. G, § 15382).

The PMPD’s discussion of the conflicting contentions of the parties regarding the proper metric for measuring power plant noise (L_{90} vs. L_{eq}) fails to acknowledge or evaluate staff’s evidence impeaching the credibility of the applicant’s noise witness, Mr. Greene. Statements Mr. Greene made in the noise section of the Magnolia Power Project AFC (01-AFC-6, Exhibit 2D) and in two scholarly papers (discussed in staff’s opening brief at pp. 4-6) contradict his recommended use of the L_{eq} metric. In the Magnolia AFC it is written:

The residual environmental noise level is the quasi-static noise level that exists in the absence of all identifiable sporadic individual noise events, such as those caused by automobile pass-bys, aircraft overflights, intermittent dog barking, et cetera. In most environments this residual level is called the ambient or background noise level.

⁵ That other public agencies may use another metric is not relevant to our decision. Few, if any, projects reviewed by other agencies involve noise sources whose noise levels are constant and unchanging.

...

The measurable statistical sound level quantity, L_{90} , and decibels A, also represents the background sound level. Exhibit 2D, pp. 5.12-1 – 5.12-2, read by Steve Baker at 2/20 RT 159:1-13.

Similarly, staff's argument that adjustment factors recommended in the literature would give results nearly identical to staff's L_{90} based analysis if they were applied to the applicant's L_{eq} based analysis (staff's opening brief, p. 5-6) is not discussed in the PMPD.

The PMPD does not clearly explain its rationale for adopting the applicant's proposed L_{eq} metric, or what the present or expected noise levels will be in terms of that metric. Finding 6 describes the L_{eq} metric as "scientifically supported" but the preceding discussion does not mention any source of that support. Staff, as we describe above, believes that L_{90} is the proper metric.

It is not clear which information persuaded the Committee to adopt the L_{eq} metric and to conclude that the noise increases would not be significant. Staff disagrees with the PMPD's statement that noise impacts would not be significant under "any noise metric presented to us by the parties" (p. 326). As the PMPD notes, staff, using the L_{90} metric, has predicted noise increases of as much 22 dBA. (PMPD, p. 324) Increases of that magnitude are "substantial" and therefore significant impacts under CEQA. If the underlying premise of this statement is that local zoning standards define the threshold of significance and noise that does not exceed those standards is per-se insignificant, it is wrong as a matter of law. While violation of a local zoning standard in most instances would be a significant impact, the lack of a violation does not necessarily support a finding of insignificance. CEQA requires that proposed activities be compared against the conditions that exist at the time of the proposal, not some hypothetical but as yet unrealized future state of development. Therefore, that an industrial facility could be allowed on the project site does not mean that we compare the noise from this power plant with a typically noisy industrial facility. Nor do we compare it to the loudest possible activity that would not offend the local noise regulations. CEQA requires that we compare it to the current, in this case very quiet, environment.⁶

The PMPD notes the applicant's \$55 million cost estimate for attenuating power plant noise sufficient to comply with staff's proposed condition **NOISE-6**. While it is again not clear if this was a factor in determining that no significant impact exists, it would be improper to do so. Feasibility of mitigation has no role in the determination of an impact's significance. A lack of feasible mitigation for an otherwise significant impact does not make the impact insignificant. Rather, feasibility is relevant to findings of overriding considerations—all feasible mitigation measures must be imposed before a project which continues to present significant impacts is approved. Here the applicant

⁶ In a similar vein perhaps, the PMPD quotes the applicant's testimony to the effect that USEPA has established a 55 dBA L_{dn} limit to protect public health. It is not clear what place this information has in the proposed findings but, just like zoning standards, a federal health protective standard does not define where significance begins. Rather, the change from the current conditions is the relevant measure of significance.

has offered only the barest of information about the costs of mitigation and no information about the individual mitigation components, making it impossible for staff or the Committee to determine whether some of the individual components are indeed feasible.⁷

Though the PMPD recites the applicant's contention that the "project would employ a considerable number of design features and noise attenuation measures" (p. 313), it does not mention, discuss or evaluate staff's contradictory evidence that the applicant's measures are nothing out of the ordinary and in fact are less than proposed for all but a couple of recent power plants. 2/20 RT 143 - 157, Exhibit 2N.

The PMPD cites the applicant's offer to make improvements to the eight existing residences most affected by the power plant's noise. If the Committee is relying on that offer to support its finding of no significant impacts, it must provide an assurance that the improvements will be made by requiring them in a Condition of Certification.⁸

In Condition **NOISE-2**, reference is made to Exhibit 1, the Noise Complaint Resolution Form, but that form is not included in the PMPD. We recommend that the form either be included or the condition be modified, as it was in the recently adopted Salton Sea Decision (02-AFC-2) to say "Use a Noise Complaint Resolution Form or functionally equivalent procedure acceptable to the CPM, to document and respond to each noise complaint."

TRANSMISSION SYSTEM ENGINEERING

The PMPD mentions that staff originally identified "three transmission lines whose reconductoring is a reasonably foreseeable consequence of SJVEC's operation." PMPD, p. 86. It does not, however, mention that staff analyzed the environmental impacts of the reconductoring and determined that any potential impacts could be mitigated by appropriate construction practices. Further the PMPD appears to limit the scope of its environmental analysis to "significant direct, indirect, or cumulative environmental impacts within the Energy Commission's jurisdiction." PMPD, p. 89.

As we have discussed in our pleadings regarding our motion to reopen the record to receive an updated analysis of additional reconductoring that have been identified since the hearings, the Energy Commission must examine the environmental impacts of the whole of this project, including likely direct consequences such as these reconductoring. That analysis is not limited to the portions under the Commission's jurisdiction.

⁷ One or two measures might, for example, offer a substantial noise reduction at a reasonable cost. Even though they don't fully mitigate the impacts, they would reduce them and are therefore required if they are feasible. CEQA rejects the "all or nothing" approach to mitigation advanced by the applicant.

⁸ Staff remains of the opinion that the improvements, as described by the applicant, will not mitigate the project's noise impacts.

Staff therefore recommends that the PMPD be revised to include a summary of the staff's conclusions regarding the reconductoring impacts and findings that are not limited to the portions of the project under the Commission's jurisdiction.

GENERAL CONDITIONS

Page 42, **COM-8**, Construction and Operation Security Plan. This condition may be replaced by the following versions update to reflect new federal security regulations:

COM-8, Construction and Operation Security Plan

At least 14 days prior to commencing construction, a site-specific Security Plan for the construction phase shall be submitted to the CPM for approval. At least 30 days prior to the initial receipt of hazardous materials on-site, a site-specific Vulnerability Assessment and Security Plan for the operational phase shall be submitted to the CPM for review and approval.

Construction Security Plan

The Construction Security Plan shall include the following:

1. site fencing enclosing the construction area;
2. use of security guards;
3. check-in procedure or tag system for construction personnel and visitors;
4. protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency; and
5. evacuation procedures.

Operation Security Plan

The Operations Security Plan shall include the following:

1. permanent site fencing and security gate;
2. evacuation procedures;
3. protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency;
4. fire alarm monitoring system;
5. site personnel background checks, including employee and routine on-site contractors [Site personnel background checks are limited to ascertaining that the employee's claims of identity and employment history are accurate. All site personnel background checks shall be consistent with state and federal law regarding security and privacy.];
6. site access for vendors; and

7. requirements for Hazardous Materials vendors to prepare and implement security plans as per 49 CFR 172.800 and to ensure that all hazardous materials drivers are in compliance with personnel background security checks as per 49 CFR Part 1572, Subparts A and B.
8. In addition, the Security Plan shall include one or more of the following in order to ensure adequate perimeter security:
 - a. security guards;
 - b. security alarm for critical structures;
 - c. perimeter breach detectors and on-site motion detectors;
 - d. video or still camera monitoring system;

The Project Owner shall fully implement the security plans and obtain CPM approval of any substantive modifications to the Security Plan. The CPM may authorize modifications to these measures, or may recommend additional measures depending on circumstances unique to the facility, and in response to industry-related security concerns.

HAZARDOUS MATERIALS

According to NFPA standards, combustible or flammable materials should be stored at least 50 feet apart. The PMPD requires a greater, 100-foot separation. To conform to the NFPA standards, we recommend the following amendments:

Page 205, last sentence in second paragraph:

“...Staff has recommended an additional condition, which requires the project owner to ensure that no combustible or flammable materials would be stored or used within ~~400~~ 50 feet of the sulfuric acid tank.”

Page 210, **Condition HAZ-5:**

“The project owner shall ensure that no combustible or flammable material is stored within ~~400~~ 50 feet of the sulfuric acid tank.”

VISUAL RESOURCES

Conditions VIS-3 and VIS-5 are not those contained in staff's December 24, 2002, addendum and should be replaced with the versions in that document.

Appendix C

Exhibit 2D contains a duplicate of the description of Exhibit 2W, which should be deleted.

Exhibit 2D: Magnolia Power Plant Application for Certification (01-AFC-6, docketed May 14, 2001), Noise Section ~~Accurate Measurements of Ultra Low NOx Levels~~ Presentation by Wilfred Hung. (Slideshow.ppt)

DATED: December 19, 2003

Respectfully submitted,

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